November 27, 2002

RE: Imagineering Enterprises, Inc 141-16781-00090
TO: Interested Parties / Applicant

FROM: Paul Dubenetzky
Chief, Permits Branch
Office of Air Quality

Notice of Decision - Approval

Please be advised that on behalf of the Commissioner of the Department of Environmental Management, I have issued a decision regarding the enclosed matter. Pursuant to 326 IAC 2, this approval was effective immediately upon submittal of the application.

If you wish to challenge this decision, IC 4-21.5-3-7 requires that you file a petition for administrative review. This petition may include a request for stay of effectiveness and must be submitted to the Office Environmental Adjudication, ISTA Building, 150 W. Market Street, Suite 618, Indianapolis, IN 46204, **within eighteen (18) calendar days from the mailing of this notice**. The filing of a petition for administrative review is complete on the earliest of the following dates that apply to the filing:

(1) the date the document is delivered to the Office of Environmental Adjudication (OEA);
(2) the date of the postmark on the envelope containing the document, if the document is mailed to OEA by U.S. mail; or
(3) The date on which the document is deposited with a private carrier, as shown by receipt issued by the carrier, if the document is sent to the OEA by private carrier.

The petition must include facts demonstrating that you are either the applicant, a person aggrieved or adversely affected by the decision or otherwise entitled to review by law. Please identify the permit, decision, or other order for which you seek review by permit number, name of the applicant, location, date of this notice and all of the following:

(1) the name and address of the person making the request;
(2) the interest of the person making the request;
(3) identification of any persons represented by the person making the request;
(4) the reasons, with particularity, for the request;
(5) the issues, with particularity, proposed for considerations at any hearing; and
(6) identification of the terms and conditions which, in the judgment of the person making the request, would be appropriate in the case in question to satisfy the requirements of the law governing documents of the type issued by the Commissioner.

If you have technical questions regarding the enclosed documents, please contact the Office of Air Quality, Permits Branch at (317) 233-0178. Callers from within Indiana may call toll-free at 1-800-451-6027, ext. 3-0178.

Enclosures

November 27, 2002

Nancy Norton
Imagineering Enterprises, Inc.
1302 West Sample Street
South Bend, Indiana 46619-3895

Re: 141-16781
First Administrative Amendment to
FESOP 141-14152-00090

Dear Nancy Norton:

Imagineering Enterprises, Inc. was issued a FESOP on November 18, 2002 for a stationary metal automotive and general commercial transportation finishing and coating source. A letter requesting a change was received on November 15, 2002. The change is the addition of one paint booth. Pursuant to the provisions of 326 IAC 2-8-10(a)(14), the permit is hereby administratively amended as follows:

Section A.2 will be amended by adding:

n) One paint booth, identified as K-6, equipped with electrostatic airless guns, including dry filters for overspray control, exhausted thru Duct E.

Section D.4 will be added to the permit:

SECTION D.4 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-8-4(10): Coating operations

(n) One paint booth, identified as K-6, equipped with electrostatic airless guns, including dry filters for overspray control, exhausted thru Duct E.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards [326 IAC 2-8-4(1)]

D.4.1 Volatile Organic Compounds (VOC) [326 IAC 8-2-9]

(a) For the topcoat operation, the VOC delivered to a coating applicator that applies extreme performance coatings shall be limited to 3.5 pounds of VOC per gallon of coating excluding water.

(b) For the primer operation, the VOC delivered to a coating applicator shall be limited to 3.0 pounds of VOC per gallon of coating, excluding water.

D.4.2 Particulate Matter (PM) [40 CFR 52, Subpart P]

Pursuant to 40 CFR 52, Subpart P, the PM from the one paint booth, K-6, shall not exceed the pound per hour emission rate established as E in the following formulas:

Interpolation of the data for the process weight rate up to sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

$E = 4.10\ P^{0.67}$ **where E = rate of emission in pounds per hour, and P = process weight rate in tons per hour**

or

Interpolation and extrapolation of the data for the process weight rate in excess of sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

$E = 55.0\ P^{0.11} - 40$ **where E = rate of emission in pounds per hour, and P = process weight rate in tons per hour.**

D.4.3 Preventive Maintenance Plan [326 IAC 2-8-4(9)]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for the one paint booth, K-6.

Compliance Monitoring Requirements [326 IAC 2-8-4][326 IAC 2-8-5(a)(1)]

D.4.4 Monitoring

(a) Daily inspections shall be performed to verify the placement, integrity and particle loading of the filters. To monitor the performance of the dry filters, weekly observations shall be made of the overspray from the paint booth stack (Duct E). The Compliance Response Plan shall be followed whenever a condition exists which should result in a response step. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a violation of this permit.

(b) Monthly inspections shall be performed of the coating emissions from the stack (Duct E) and the presence of overspray on the nearby ground. The Compliance Response Plan for these units shall contain troubleshooting contingency and response steps for when a noticeable change in overspray emission, or evidence of overspray emission is observed. The Compliance Response Plan shall be followed whenever a condition exists which should result in a response step. Failure to take response steps in accordance with Section C - Compliance Response Plan Preparation, Implementation, Records, and Reports, shall be considered a violation of this permit.

(c) Additional inspection and preventive measures shall be performed as prescribed in the Preventive Maintenance Plan.

Record Keeping and Reporting Requirements [326 IAC 2-8-4(3)][326 IAC 2-8-16]

D.4.5 Record Keeping Requirements

(a) To document compliance with Condition D.4.1, the Permittee shall maintain records in accordance with (1) below. Records maintained for (1) shall be taken monthly and shall be complete and sufficient to establish compliance with the VOC emission limits.

(1) The VOC content of each coating material and the solvent used. Records shall include purchase orders, invoices, and material safety data sheets (MSDS) necessary to verify the type and amount used. Solvent usage records shall differentiate between those added to coatings and those used as cleanup solvents.

(b) To document compliance with Condition D.4.4, the Permittee shall maintain a log of weekly overspray observations, daily and monthly inspections, and those additional inspections prescribed by the Preventive Maintenance Plan.

(c) All records shall be maintained in accordance with Section C - General Record Keeping Requirements of this permit.

Pursuant to 326 IAC 6-3-1(a)(15), the paint booth is exempt from this rule because it will use less than five gallons per day.

All other conditions of the permit shall remain unchanged and in effect. Please attach a copy of this amendment and the following revised permit pages to the front of the original permit.

This decision is subject to the Indiana Administrative Orders and Procedures Act - IC 4-21.5-3-5. If you have any questions on this matter, please contact Donald Poole, at (800) 451-6027, press 0 and ask for Donald Poole or extension 2-8327, or dial (317) 232-8327.

Sincerely,

Original signed by Paul Dubenetzky

Paul Dubenetzky, Chief
Permits Branch
Office of Air Quality

Attachments
drp
cc: File - St. Joseph County
U.S. EPA, Region V
St. Joseph County Health Department
Northern Regional Office
Air Compliance Section - Paul Karkiewicz
Compliance Data Section - Karen Nowak
Administrative and Development
Technical Support and Modeling - Michele Boner

FEDERALLY ENFORCEABLE STATE OPERATING PERMIT (FESOP) RENEWAL OFFICE OF AIR QUALITY

Imagineering Enterprises, Inc.
1302 West Sample Street
South Bend, Indiana 46619-3894

(herein known as the Permittee) is hereby authorized to operate subject to the conditions contained herein, the source described in Section A (Source Summary) of this permit.

This permit is issued in accordance with 326 IAC 2 and 40 CFR Part 70 Appendix A and contains the conditions and provisions specified in 326 IAC 2-8 as required by 42 U.S.C. 7401, et. seq. (Clean Air Act as amended by the 1990 Clean Air Act Amendments), 40 CFR Part 70.6, IC 13-15 and IC 13-17.

Operation Permit No.: F 141-14152-00090	
Issued by:Original signed by Paul Dubenetzky Paul Dubenetzky, Branch Chief Office of Air Quality	Issuance Date: November 18, 2002 Expiration Date: November 18, 2007

First Administrative Amendment 141-16781	Pages Amended: 4,6, 36a, and 36b
Issued by: Original signed by Paul Dubenetzky Paul Dubenetzky, Branch Chief Office of Air Quality	Issuance Date: November 27, 2002

Compliance Determination Requirements

D.2.4 Particulate Control (PM and PM_{10})

Compliance Monitoring Requirements [326 IAC 2-8-4] [326 IAC 2-8-5(a)(1)]

D.2.5 Visible Emissions Notations

D.2.6 Baghouse Inspections

D.2.7 Broken or Failed Bag Detection

Record Keeping and Reporting Requirement [326 IAC 2-8-4(3)] [326 IAC 2-8-16]

D.2.8 Record Keeping Requirements

SECTION D.3 FACILITY OPERATION CONDITIONS: Insignificant Activities

Emission Limitations and Standards [326 IAC 2-8-4(1)]

D.3.1 Particulate [326 IAC 6-2-4]

D.3.2 Volatile Organic Compounds (VOC) [326 IAC 8-1-6]

D.3.3 Volatile Organic Compounds (VOC) and Hazardous Air Pollutants (HAPs) [326 IAC 2-8-4]

Compliance Determination Requirements

D.3.4 Volatile Organic Compounds (VOC) and Hazardous Air Pollutants (HAPs)

Compliance Monitoring Requirements [326 IAC 2-8-4] [326 IAC 2-8-5(a)(1)]

There are no applicable compliance monitoring conditions for these facilities.

Record Keeping and Reporting Requirements [326 IAC 2-8-4(3)] [326 IAC 2-8-16]

D.3.5 Record Keeping Requirement

D.3.6 Reporting Requirements

SECTION D.4 FACILITY OPERATION CONDITIONS: One paint booth

Emission Limitations and Standards [326 IAC 2-8-4(1)]

D.4.1 Volatile Organic Compounds (VOC) [326 IAC 8-2-9]

D.4.2 Particulate Matter (PM) [40 CFR 52, Subpart P]

D.4.3 Preventive Maintenance Plan [326 IAC 2-8-4(9)]

Compliance Monitoring Requirements [326 IAC 2-8-4] [326 IAC 2-8-5(a)(1)]

D.4.4 Monitoring

Record Keeping and Reporting Requirements [326 IAC 2-8-4(3)] [326 IAC 2-8-16]

D.4.5 Record Keeping Requirements

Certification
Emergency Occurrence Report
Monthly Reports
Quarterly Reports
Quarterly Deviation and Compliance Monitoring Report

(e) Conversion Coating Line #2, which is a phosphate coating line, identified as C-2 through C-8 and C-25 exhausted through Ducts T and U.

(f) Conversion Coating Line #4, which is a phosphate coating line, identified as F-1 through F-9, exhausted through Stack A.

(g) Plating Line #1, for electroless nickel plating, identified as prep tanks E-1 through E-8, E-21, and F-10, with E-1 exhausted through Stack A, plating tanks E-2 through E-8 exhausted through Stack D, and E-21 and F-10 exhausted through Stacks Z and AA.

(h) Plating Line #2, for electroless nickel plating, identified as E-9 through E-13, E-15 through E-20, E-22 through E-27, E-30 and E-31, exhausted through Stack C.

(i) One (1) non-destructive testing area, consisting of eight (8) penetrant tanks, identified as J-1 through J-7 and J-14, one (1) ZL-4C penetrant tank, identified as J-11, and one (1) nitric-hydrofluoric tank, identified as J-13.

(j) Six (6) portable cold cleaner degreasers, identified as I-3 through I-8, constructed prior to March 1993, using methyl ethyl ketone (MEK), capacity: less than 13 gallons, each.

(k) One (1) immersion solvent cleaning tank, identified as I-13, constructed in 2001, using methyl ethyl ketone (MEK), capacity: 8 gallons.

(l) One (1) portable immersion cold cleaner tank, identified as I-14, constructed in 2000, using isopropyl alcohol, capacity: 6 gallons.

(m) Four (4) blaster booths, two (2) using aluminum oxide, one (1) using glass, vermiculite or an equivalent media, and one (1) using glass, plastic, aluminum oxide or an equivalent media, and one (1) tumble blaster, using aluminum oxide beads, collectively identified as J-9, one (1) of the blaster booths is a wet blaster and the others are equipped with small baghouse dust collectors exhausting into the room; all of the blaster booths are equipped with a common baghouse dust collector exhausted through Vent H, maximum capacity: 400 pounds of parts and 0.7 pounds of blasting media per hour, total.

(n) One paint booth, identified as K-6, equipped with electrostatic airless guns, including dry filters for overspray control, exhausted thru Duct E.

A.3 Insignificant Activities [326 IAC 2-7-1(21)] [326 IAC 2-8-3(c)(3)(I)]

This stationary source also includes the following insignificant activities, as defined in 326 IAC 2-7-1(21):

(a) Natural gas-fired combustion sources with heat input equal to or less than ten million (10,000,000) British thermal units per hour, including:

(1) One (1) boiler, identified as B-1, constructed in 1997, fired by natural gas, capacity: 2.07 million British thermal units per hour. [326 IAC 6-2-4]

(2) One (1) makeup air unit, identified as M-2, constructed in 1997, fired by natural gas, capacity: 4.8 million British thermal units per hour.

(3) One (1) water heater, identified as J-10, exhausting through Stack Y, capacity: 0.150 million British thermal units per hour.

(4) Two (2) space heaters, identified as N-1 and N-2, capacity: 0.175 million British thermal units per hour, each.

SECTION D.4 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-8-4(10): Coating operations

(n) One paint booth, identified as K-6, equipped with electrostatic airless guns, including dry filters for overspray control, exhausted thru Duct E.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards [326 IAC 2-8-4(1)]

D.4.1 Volatile Organic Compounds (VOC) [326 IAC 8-2-9]

(a) For the topcoat operation, the VOC delivered to a coating applicator that applies extreme performance coatings shall be limited to 3.5 pounds of VOC per gallon of coating excluding water.

(b) For the primer operation, the VOC delivered to a coating applicator shall be limited to 3.0 pounds of VOC per gallon of coating, excluding water.

D.4.2 Particulate Matter (PM) [40 CFR 52, Subpart P]

Pursuant to 40 CFR 52, Subpart P, the PM from the one paint booth, K-6, shall not exceed the pound per hour emission rate established as E in the following formulas:

Interpolation of the data for the process weight rate up to sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

$E = 4.10\ P^{0.67}$ where E = rate of emission in pounds per hour, and P = process weight rate in tons per hour

or

Interpolation and extrapolation of the data for the process weight rate in excess of sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

$E = 55.0\ P^{0.11} - 40$ where E = rate of emission in pounds per hour,and P = process weight rate in tons per hour.

D.4.3 Preventive Maintenance Plan [326 IAC 2-8-4(9)]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for the one paint booth, K-6.

Compliance Monitoring Requirements [326 IAC 2-8-4][326 IAC 2-8-5(a)(1)]

D.4.4 Monitoring

(n) Daily inspections shall be performed to verify the placement, integrity and particle loading of the filters. To monitor the performance of the dry filters, weekly observations shall be made of the overspray from the paint booth stack (Duct E). The Compliance Response Plan shall be followed whenever a condition exists which should result in a response step. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a violation of this permit.

(o) Monthly inspections shall be performed of the coating emissions from the stack (Duct E) and the presence of overspray on the nearby ground. The Compliance Response Plan for these units shall contain troubleshooting contingency and response steps for when a noticeable change in overspray emission, or evidence of overspray emission is observed. The Compliance Response Plan shall be followed whenever a condition exists which should result in a response step. Failure to take response steps in accordance with Section C - Compliance Response Plan Preparation, Implementation, Records, and Reports, shall be considered a violation of this permit.

(p) Additional inspection and preventive measures shall be performed as prescribed in the Preventive Maintenance Plan.

Record Keeping and Reporting Requirements [326 IAC 2-8-4(3)][326 IAC 2-8-16]

D.4.5 Record Keeping Requirements

(a) To document compliance with Condition D.4.1, the Permittee shall maintain records in accordance with (1) below. Records maintained for (1) shall be taken monthly and shall be complete and sufficient to establish compliance with the VOC emission limits.

(1) The VOC content of each coating material and the solvent used. Records shall include purchase orders, invoices, and material safety data sheets (MSDS) necessary to verify the type and amount used. Solvent usage records shall differentiate between those added to coatings and those used as cleanup solvents.

(b) To document compliance with Condition D.4.4, the Permittee shall maintain a log of weekly overspray observations, daily and monthly inspections, and those additional inspections prescribed by the Preventive Maintenance Plan.

(c) All records shall be maintained in accordance with Section C - General Record Keeping Requirements of this permit.

Appendix A: Emissions Calculations
VOC and Particulate
From Surface Coating Operations

Company Name: **Imagineering Enterprises, Inc.**
Address City IN Zip: **1302 West Sample St., South Bend, IN**
Application No.: 141 – 16781
Plt ID: 141 – 00090
Reviewer: drpoole
Date: November 25, 2002

Material	Density (Lb/Gal)	Weight % Volatile (H20 & Organics)	Weight % Water	Weight % Organics	Volume % Water	Volume % Non-Volatiles (solids)	Gal of Mat. (gal/unit)	Maximum (unit/hour)	Pounds VOC per gallon of coating less water	Pounds VOC per gallon of coating	Potential VOC pounds per hour	Potential VOC pounds per day	Potential VOC tons per year	Particulate Potential (ton/yr)	lb VOC/gal solids	Transfer Efficiency
Primer	12.9	21.40%	0.0%	21.4%	0.0%	60.30%	0.01071	8.333	2.76	2.76	0.25	5.91	1.08	1.19	4.58	70%
Primer Solvent	6.5	99.86%	0.0%	99.9%	0.0%	0.00%	0.00311	8.333	6.48	6.48	0.17	4.03	0.74	0.00	ERR	70%
Topcoat	9.6	43.46%	0.0%	43.5%	0.0%	36.97%	0.01036	8.333	4.18	4.18	0.36	8.66	1.58	0.62	11.31	70%
Topcoat Solvent	7.3	100.00%	0.0%	100.0%	0.0%	0.00%	0.00259	8.333	7.25	7.25	0.16	3.76	0.69	0.00	ERR	70%

State Potential Emissions **Add worst case coating to all solvents** **0.93** **22.36** **4.08** **1.81**

METHODOLOGY

Pounds of VOC per Gallon Coating less Water = (Density (lb/gal) * Weight % Organics) / (1-Volume % water)
Pounds of VOC per Gallon Coating = (Density (lb/gal) * Weight % Organics)
Potential VOC Pounds per Hour = Pounds of VOC per Gallon coating (lb/gal) * Gal of Material (gal/unit) * Maximum (units/hr)
Potential VOC Pounds per Day = Pounds of VOC per Gallon coating (lb/gal) * Gal of Material (gal/unit) * Maximum (units/hr) * (24 hr/day)
Potential VOC Tons per Year = Pounds of VOC per Gallon coating (lb/gal) * Gal of Material (gal/unit) * Maximum (units/hr) * (8760 hr/yr) * (1 ton/2000 lbs)
Particulate Potential Tons per Year = (units/hour) * (gal/unit) * (lbs/gal) * (1- Weight % Volatiles) * (1-Transfer efficiency) *(8760 hrs/yr) *(1 ton/2000 lbs)
Pounds VOC per Gallon of Solids = (Density (lbs/gal) * Weight % organics) / (Volume % solids)
Total = Worst Coating + Sum of all solvents used

Appendix A: Emission Calculations
HAP Emission Calculations

Company Name: Imagineering Enterprises, Inc.
Address City IN Zip: 1302 West Sample St., South Bend, IN
Application #: 141 – 16781
Plt ID: 141 – 00090
Permit Reviewer: drpoole
Date: November 25, 2002

Material	Density (Lb/Gal)	Gallons of Material (gal/unit)	Maximum (unit/hour)	Weight % Xylene	Weight % Ethyl Benzene	Weight % Toluene	Weight % MIK	Weight % Hexane	Weight % Glycol Ethers	Weight % Methanol	Xylene Emissions (ton/yr)	Eth. Benz. Emissions (ton/yr)	Toluene Emissions (ton/yr)	MIK Emissions (ton/yr)	Hexane Emissions (ton/yr)	Glycol Ethers Emissions (ton/yr)	Methanol Emissions (ton/yr)
Primer	12.9	0.010710	8.33	5.00%	0.00%	0.00%	35.00%	0.00%	0.00%	0.00%	0.25	0.00	0.00	1.76	0.00	0.00	0.00
Primer Solven	6.49	0.003110	8.33	0.00%	0.00%	10.00%	0.00%	0.00%	0.00%	0.00%	0.00	0.00	0.07	0.00	0.00	0.00	0.00
Topcoat	9.62	0.010360	8.33	47.00%	5.00%	0.00%	0.00%	0.00%	0.00%	0.00%	1.71	0.18	0.00	0.00	0.00	0.00	0.00
Topcoat Solve	7.25	0.002590	8.33	100.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.69	0.00	0.00	0.00	0.00	0.00	0.00
Total State Potential Emissions											**2.65**	**0.18**	**0.07**	**1.76**	**0.00**	**0.00**	**0.00**

METHODOLOGY

HAPS emission rate (tons/yr) = Density (lb/gal) * Gal of Material (gal/unit) * Maximum (unit/hr) * Weight % HAP * 8760 hrs/yr * 1 ton/2000 lbs

hapcalc.wb3